Needs-Based Health Promotion Program Serves as HMO Marketing Tool

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Synopsis

A needs assessment survey was originally conducted at the George Washington University Health Plan in 1981 and repeated in 1983 for evaluation and redirection. The survey resulted in a program which attempted to address the perceived needs of its members. The response, not only of the patients, but also of both the HMO clinical and marketing staffs, resulted in further program development, an established role for health promotion in HMO marketing, and a model of preventive care teaching in ambulatory primary care medicine.

THE GEORGE WASHINGTON UNIVERSITY HEALTH PLAN is a 20,000-member health maintenance organization (HMO) affiliated with the George Washington University in Washington, DC. Founded in 1972, the HMO provides medical services to members and serves as a model ambulatory care teaching site for medical residents in primary care, internal medicine, and pediatrics, for junior medical students on a required clinical clerkship, and for nurse practitioners and physician assistant students. All physicians, as well as many other clinical staff members, have faculty appointments and are engaged in teaching on a daily basis.

An HMO health promotion program was developed in 1982 as a response to expressed member and clinician desires and expectations. Although initially "needs-driven," the program also serves as a model for the incorporation of health education into the everyday practice of primary care medicine (*1–4*). It engages the interest and participation of practicing faculty and facilitates role modeling of attitudes, skills, and behavior for residents and students in one-on-one counseling and in the role of the physician as a public health educator (*5*). Because nonphysician staff members participate in teaching throughout the program, trainees gain an appreciation of other health professional resources, both as sources of information and for patient referral (*6*).

The promotion program was based on a survey of both HMO members and clinicians who were asked about their needs and interests. Results of the survey, which were described in a previous article (*1*), showed a high level of interest among members in preventive care information, particularly healthy members who otherwise would not be likely to utilize the HMO. Although clinicians originally chose disease-oriented topics, they shifted to preventive care when they were shown results of the members' survey and were asked to re-rank their concerns.

Enlisting the efforts of many of the health plan clinicians, staff, and patients, the promotion-education program now consists of a semiannual seminar series, printed materials available in a variety of locations, rapid practitioner access to special patient education information, a physical fitness program, and a new marketing approach.

The objectives of the program are to encourage the participation in the HMO of healthy enrollees as well as those with illness by providing accurate sources of information for self-care of minor acute complaints and skills for risk reduction.

Program Evaluation Methods

Survey methods. Two years after the original needs survey, two evaluations were conducted to measure both members' awareness of and interest in the program and any need for program changes. The evaluation was mailed as part of an annual member

survey sent to a random sample of 1,180 subscribers (contract holders). A return envelope was included.

At the same time (fall 1983), an onsite evaluation survey was conducted in which questionnaires were handed out by a research assistant in both pediatric and adult waiting areas. These were designed to measure the interests of a captive population. An attempt was made to sample each person coming to the health plan facility during the period in question.

They were asked about their interests and previous participation in the seminars and about their awareness of the various kinds of printed materials available at the HMO. They were also requested to indicate individual topics of interest and to indicate the importance of health education in their motivation to become or remain HMO members.

A total of 354 mail questionnaires were returned completed—a response rate of 30 percent. Of the 300 questionnaires distributed onsite, 280 were completed for a response rate of 93 percent.

Demographic characteristics of both mail and onsite samples are shown in table 1.

The onsite sample had a higher proportion of blacks, females, and parents than the mail sample. Its members were also younger and had lower educational achievement. In spite of the demographic differences, however, the four most frequently chosen topics of "strong interest" were identical in both groups: anxiety-stress, physical fitness, depression, and cardiopulmonary resuscitation (CPR). Since responses to the questions in both mail and onsite surveys on awareness and experiences with the program were identical, only the results of the onsite survey are being reported here.

Seminar evaluation by participants. One-page evaluation forms were given to each person who had attended a seminar. They were asked about the usefulness of the information presented, satisfaction with the format (length, level of sophistication, and so forth), and demographic information.

Efficacy of risk reduction programs. The quit rates achieved by the smoking cessation classes were monitored both at the end of the 8-week program and after 1 year.

The Health Promotion Program

Seminars and ongoing classes. Since several of the topics picked most often by patients were appropriate for seminar presentation, the first outcome of the original health education survey was a series of seminars on four topics: anxiety-stress, depression, physical fitness, and CPR.

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Table 1. Demographic characteristics of survey respondents, fall, 1983

Characteristic	Mail survey		Onsite survey	
	Number	Percent	Number	Percent
Age:				
Male	128	[1]40.1	44	[1]37.1
Female	202	[1]36.1	137	[1]33.8
Sex:				
Male	130	38.9	57	28.5
Female	204	61.1	143	71.5
Race:				
Black	74	23.5	91	45.7
White	227	71.8	99	49.7
Other	15	4.7	9	4.5
Education:				
Junior-senior high	38	11.3	47	23.6
Some college	54	16.0	55	27.6
College degree	90	26.7	32	16.1
Post college, Graduate degree	155	46.0	64	32.7
Family structure of respondent:				
Self only	173	51.6	65	32.7
Self and spouse	75	22.4	40	20.1
Self, spouse, child(ren)	72	21.5	64	32.2
Self, child	15	4.5	30	15.1

[1] Mean years.

A special notice announcing the seminars was mailed to all 12,400 HMO households. In a short time, 548 members called to register—a larger response than was expected. Because of the demand for the first seminar series, additional sessions were quickly scheduled, and a total of 12 were held in a 12-week period. When clinicians and mental health staff members saw the enthusiastic patient response, their interest in conducting seminars and in suggesting new topics increased substantially.

Since the first series, four more seminar series have been held, each announced by a special mailing (spring and fall), resulting in 40 separate semi-

'Total operating costs of the program are estimated at $840 per month for materials . . . and $4,533 per month for labor . . . for a total cost of $.25 per member month. This sum is well within the range of published budgets for health education programs.'

nars with 2,467 registrants. In response to member preference, 1-hour seminars are scheduled in the early evening. Single-session seminars are now given on 15 different subjects:

- Avoiding exercise injury
- Cardiopulmonary resuscitation
- Childhood emergencies
- Depression
- Diet and exercise
- Discussing sex with your children
- Fitting fitness into your office routine
- Nutrition
- Oh, my aching back
- Pregnancy after 30
- Prescription and over-the counter drugs
- Self-defense
- Stress management
- Weight control
- Women and stress in the 80s.

There are also six ongoing classes: smoking cessation, weight loss, pre- and post partum groups, care of the back, physical fitness evaluation, and exercise.

Except for the CPR course, which is taught by members of the District of Columbia Fire Department, all seminars have been conducted by health plan staff. Although some sessions take place during clinical hours, in most cases the services of the seminar leader after clinic hours are donated. For example, members of the mental health division (clinical psychologists and social workers) have given seminars on anxiety-stress, depression, weight control, sex education for children, and other topics. A pediatrician has spoken on childhood emergencies, and an obstetrics nurse practitioner, a guest neonatologist, and a geneticist gave a seminar on pregnancy after age 30. The HMO clinical pharmacist spoke on over-the-counter drugs and interaction with other drugs, and the HMO nutritionist spoke on basic nutrition.

Seminar attendees' evaluation results. On the whole, 43 percent of those registering for the free classes attended (range: 15–77 percent), and, of those attending, 92 percent completed evaluations. A vast majority—182 of 205, or 88.7 percent—of those responding to the evaluation survey said the seminar they attended met or exceeded their expectations. Although there was some variation by seminar topics, the "modal" attendee, except at the seminar on self-defense, was female (51–79 percent), highly educated (54–88 percent had a college degree or had done graduate study, or both), young (median age 32–39), and white (46–92 percent). Survey respondents' interest in the seminars and in health education was reflected in the onsite survey results. Following are the percentages of persons interested in the various topics:

Topic	*Interested*[1]	*Not interested*
Prenatal-post partum groups	22.3	77.7
Smoking cessation, weight control	51.3	48.7
Physical fitness	73.0	27.0
Single session seminars	61.0	39.0

[1] Includes responses of "have attended," "definitely plan to attend," and "interested."

Instructors received summaries of the evaluations and comments so that they could modify their presentations. For instance, early CPR attendees indicated confidence in recognizing and responding to various categories of emergencies, but noted that they were "not confident" or "would not attempt" the Heimlich maneuver. Consequently, this instruction area was strengthened.

Efficacy of risk reduction. Data from the first 2 years of the smoking cessation group showed a quit rate at the end of the 8-week program of 75 percent, according to Dr. Kathleen Davis, director of the smoking cessation program. After 1 year, about half of those who had quit remained smoke free. This quit rate compares favorably with a quit rate of 50 percent cited for "top flight programs" (*7*).

Printed materials. The second direct outcome of the needs survey followed the information that members had a strong interest in a variety of written material; in fact, for most topics, they much preferred written material to other options offered. This led to the distribution of published information and the writing of a set of handouts that were made available to patients and providers in appropriate locations throughout the facility. Written material included pamphlets obtained from public sources, books reviewed and made available in the library, HMO staff-authored material on common primary care problems, and clinical reference articles made available to providers for discretionary use.

Pamphlets. Survey topics of particular interest to members as a group and to subsets of patients (preventive care unique to men, women, children, and so forth), as well as disease-oriented publications (on diabetes or arthritis, for example), were chosen first. Two nurse practitioners, a nutritionist, and a physician gathered all material at the health plan facility as well as that obtained from public and private sources. They reviewed all the pamphlets with an eye toward accuracy, suitability to the member population, and price. Material chosen for use is free to the health plan or available at very low cost. Such material has, unfortunately, declined dramatically in the last 2 years because of the elimination or increased cost of many excellent U.S. Government publications.

Books. Practitioners in all departments, HMO psychologists, and other staff members were asked to suggest books. Lists of other health education library books were also obtained. All suggested books were reviewed, and those felt to be the most useful were purchased. Both pamphlets and books are displayed in a centrally located library room. Easily accessible to members and attractively furnished, it affords quiet and privacy.

Lists describing the library's 140 volumes are cross-referenced by topic and give the price and most inexpensive local source for each book. Copies of the list are in the library and in every examination room to promote their use by patients. Signs inviting members to the library are posted throughout the HMO. Pamphlets are displayed in racks for self-selection; books are in a locked cabinet, but are easily available by request. Newsletters and magazines, such as the FDA Consumer, are in binders on the tables.

A second display case for pamphlets is in the main lobby of the HMO where patients typically wait for prescriptions and laboratory tests.

Clinical references. A third outcome of the health education survey was the development of a system of choosing, supplying, and displaying material for the specific use of health care providers when they are counseling their patients. All material currently in use was reviewed by two nurse practitioners, a nutritionist, and a primary care physician. They also sought information on topics which practitioner respondents had requested as being "most helpful in their practice."

Educational material concerning 40 topics was chosen and placed in vertical carousel files in each of four practice areas used for consultation by the medical staff and trainees. Topics included specific disease and health problems, guidelines for travel immunization, 1,200-calorie diets, and so forth. Topics are adjusted periodically to accommodate practitioners' changing needs.

Table 2. Percentage of members reporting experience with written health education materials[1]

Material	Fall 1983 (N = 272)	Fall 1984 (N = 228)
Pamphlets	56.6	71.6
HMO-authored handouts in examination room	51.8	62.3
Given written information by clinician	38.6	47.8

[1] 5.7 percent reported that they had not visited the health plan's facility.

HMO staff-authored handouts. Certain information desired by survey respondents was so frequently applicable to HMO members that special handouts were prepared on 12 topics and made available in all the examining rooms:

- Blood tests and how to interpret lab work
- Common colds and "the flu"
- Constipation
- Diaphragm
- Gastroenteritis or "stomach flu"
- Hemophilus or *Gardnerella* vaginitis
- Menopause
- The physical exam
- Trichomoniasis
- Urinary tract infection
- Vaginal health
- Vaginal yeast infection

Evaluation of printed materials. More than half (56.6 percent) of the survey respondents had obtained pamphlets, and 51.8 percent of respondents had obtained HMO-authored sheets in the examination rooms. Six months after the carousel files had been set up, 38.6 percent of respondents reported that they had been given health education materials by their practitioners (table 2). A survey 1 year later (fall 1984) showed increased levels of member awareness and distribution of health education materials. On a scale of 1 to 5, with 5 the highest, 35 percent of members surveyed reported their interest in such material as a 5; 79 percent reported an interest level of 3 or higher.

Physical fitness program. The initial health education survey showed that physical fitness was of great interest to members (38 percent of respondents). After one seminar explaining the principles of aerobic conditioning, safe warm-up exercises, and

other general topics, the HMO management felt there was enough interest to embark on a larger project.

Accordingly, the health plan first hired a single staff member to implement a new fitness initiative in conjunction with its marketing efforts. Members can self-refer to the program or be referred by their practitioner. After completing a fitness and personal history questionnaire, members are given a personal fitness assessment. In some circumstances, members must have medical clearance to participate in the program. Recommendations are made to both groups for exercise plans which can be carried out individually. A re-evaluation is made after 8 and 16 weeks. Ongoing aerobic exercise classes are also offered.

There are now two full-time and one part-time staff members with specialized training in exercise science and sports medicine. During the first 12 months of operation, the physical fitness program staff screened more than 500 members. The staff also participates in the seminar series, presenting talks on topics such as "Risk Factors in Coronary Artery Disease" and "Diet and Exercise."

Participant evaluation. Intake questionnaires filled out by program participants asked how important the physical fitness program was in their decision either to join the HMO or to remain HMO members. On a scale of 1 to 5, with 1 "very important," 25 percent of new members listed 1; 41 percent indicated 1 or 2. Of continuing members, 23 percent listed 1 or 2.

Fifty-nine percent of the program's participants were female, somewhat more than in the total health plan population. The age distribution of participants closely approximated the health plan's population.

In November 1984, 2 to 15 months after they entered the program, a sample of participants was surveyed by telephone for a followup evaluation, according to Kaye Campbell, then director of the physical fitness program. Respondents identified their primary reasons for having come to the center as "determining their fitness level," 61 percent; "lose weight," 32 percent; and "information on weight control," 13 percent. "Injury avoidance," "risk control," and "sports training" were of comparatively minor importance. Respondents singled out three areas as having been particularly helpful: "information on proper exercise," 75 percent; "providing motivation for exercising," 36 percent; and "information on weight control," 13 percent. Seventy percent of respondents reported that they had followed the program 3 months or more. Four percent did not follow the personalized program at all. At the time of followup, 66 percent reported that they were still following the program, and 39 percent had returned for their second (8-week) evaluation.

Overall program evaluation—member survey. When asked how they would rate their interest in various types of health education materials, survey respondents again confirmed a clear preference for written materials (newsletters and handouts), followed by seminars and videotapes. Following are the percentages of respondents giving low and high ratings to their interest in four kinds of patient education materials:

Type of material	*Percent*		*Mean rating*[1]
	Low (1)	*High (5)*	
Newsletter	6.8	40.1	3.8
Patient handouts	8.0	35.0	3.6
Seminars	17.8	20.2	3.1
Videotapes	33.6	16.4	2.6

[1] Mean rating when rating 1–5 is treated as continuous, equal interval scale.

A summary question asked how important or unimportant the health education program was to the respondent's membership in the HMO. Of 257 respondents, 206 indicated that it was important (31.5 percent), moderately important (17.9 percent), or very important (30.7 percent). Fifty-one respondents said it was not very important (16.3 percent) or not at all important (3.5 percent) to their membership.

Cost of the Health Education Program

The costs of implementing and operating the health education program may be divided into startup costs (one-time, nonrecurring costs) and operating costs (expressed as approximate costs per month). Each type of cost may be further divided into those which are "fixed costs" to the HMO and those which are incremental costs. Table 3 shows the estimated resources used during the first 24 months of operation. Dollar amounts have not been imputed to the fixed costs which consist primarily of HMO facilities and inkind staff services such as preparation and delivery of seminars and review of health education materials.

Startup costs were estimated at $6,374 ($3,696 for written materials and $2,678 for the physical fitness program). This amount does not include inkind services such as review of materials, seminar preparation, or the needs assessment survey.

Table 3. Estimated costs of the health promotion program, George Washington University Health Plan

Startup costs (1-time, nonrecurring)				*Operating costs per month*			
Fixed cost to HMO	*Hours*	*Incremental costs*	*Dollars*	*Fixed costs to HMO*	*Hours*	*Incremental costs*	*Dollars or FTE*
SEMINARS							
Preparation	24	.....		Administration:		Nutritionist	0.1
				HED	6	Printing, mailing announcements	$333
				Secretarial	3		
				Marketing announcements	7		
				Seminar delivery	3		
				Facility (room for 40 persons).			
WRITTEN MATERIALS							
Review of materials	90	Equipment, furnishings	$1,712	Review and update materials (HED)	6	Nutritionist	0.15
Writing, 12 topics	100	Books	424			Duplicating and printing	$407
		Printing	1,560				
PHYSICAL FITNESS PROGRAM							
.....		Equipment	$1,530	Office space, administration.		Program director	1.0
				Large room for exercises, small room for assessments.		Program assistants	1.0
						Reprinting and supplies	$100
PROGRAM ADMINISTRATION							
.....		.....		HED	21	Secretarial	0.5
PROGRAM EVALUATION							
Preparation of survey and evaluation	15	.....		Director's evaluations		.....	
				QA	12		
				Member survey, data collection, processing.			

NOTE: HED = health education director, FTE = full-time equivalent.

Incremental operating costs were estimated at $333 per month for seminars. Additional incremental labor costs included a 0.10 full-time equivalent (FTE) nutritionist, part of whose responsibilities were to develop seminars. Incremental operating costs for written materials were estimated at $407 per month plus 0.15 FTE of the nutritionist's time. Incremental costs for the physicial fitness program were $100 per month plus physical fitness staffing at 2.0 FTE. Secretarial-administrative assistance of 0.05 FTE was provided for the entire health promotion program.

Total operating costs of the program are estimated at $840 per month for materials ($.04 per member month) and $4,533 per month for labor ($.21 per member month) for a total cost of $.25 per member month. This sum is well within the range of published budgets for health education programs (*8*). Staff consists of a 0.3 FTE progam director, a 0.1 FTE program evaluator, 2.0 FTE physical fitness staff members, a 0.25 FTE nutritionist, and a 0.5 FTE administrative-secretarial assistant.

Ninety-one percent of the incremental labor costs are for the physical fitness program. Again, labor costs do not include fixed costs such as a portion of the salaries of the program director, the seminar leaders, those who review written materials, or the editor of the quarterly newsletter.

Health Promotion as a Marketing Approach

Prior to the needs assessment, the marketing department emphasized medical services. In response to the development of the health promotion program (the survey, resulting seminars, written materials, and library) and the positive evaluations, the marketing focus changed to emphasize health promotion as well as comprehensive care. The

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newsletter has been expanded, seminars are taken to the worksite, and television series are produced, all reflecting the different orientation.

Newsletter. The HMO's marketing program has responded to results of the original survey in which members had reported particular interest in the quarterly newsletter. It has been increased from 8 to 16 pages, and articles on subjects known from the survey to be of interest to members are frequently included. The newsletter has become a primary marketing instrument of the health plan while it continues to provide useful information to members. A recent survey of members about their interest in the newsletter shows continuing high readership. Fully half of the members who were screened for physical fitness reported that they learned about the program from the newsletter.

Outreach. Seminars on health promotion are also provided to prospective employee member groups or to already enrolled groups at their worksites. These include such topics as "Oh, My Aching Back" and "Fitting Fitness into Your Office Routine." Nonmembers are invited to attend these popular lunch-hour seminars.

Television. A third aspect of health promotion activity was participation by the HMO staff in television features. During the fall of 1983, a 4-week series, "Fighting Fat," on a local evening news program brought some 44,000 requests for the health plan diet and contributed to much greater exposure for the HMO. The menus for the diet were written by the health plan nutritionist. During the first week of the series, a different member of the health plan staff spoke each night about diet-related topics.

A second television series, stressing prevention and self-care subjects, was presented by health plan clinicians on evening news programs in the spring of 1984. The subjects of these 2–3 minute segments included acne cosmetica, fad diets, over-the-counter medications, and patient compliance with prescriptions. Health plan clinicians appeared on TV and radio 22 times over a 12-month period. Although not necessarily experienced in this medium, clinicians who were exposed to it enjoyed the opportunity to share their knowledge, and they were willing to participate in other tapings for television.

Market segmentation. As health promotion became an integral part of plan marketing, it set in motion a cause-and-effect cycle. The more new members were drawn to the health plan because of its health promotion, the more these activities were reinforced and expanded.

This trend is noteworthy, particularly because the effect was the reverse of recent predictions. Some health care observers have predicted that health education efforts would be eliminated as competition increased (*9,10*). They have said that pressure to retain only so-called "essential benefits" and thereby control premiums would lead to elimination of health promotion efforts. In the Washington, DC, area, increasing competition came, coincidentally, at about the same time as the health plan's health education survey, and led to the recognition of the value of health promotion in creating a marketable identity for the health plan (*11*).

Discussion

The health promotion program of this HMO has emphasized written material in response to members' strongly stated preferences. Accordingly, material was provided in locations appropriate to its intended use. First, members should be able to self-select information which may not be part of a medical encounter. Also important is material provided to the patient during the medical visit by his or her practitioner. Giving the patient written material during the visit can reinforce verbal education and instruction and deepen the patient's understanding.

In addition, the written information is validated because it is provided by someone the patient trusts. In turn, taking the time and showing the interest in giving the patient material enhances the patient-clinician relationship (*12*). This example encourages the medical students and residents to adopt similar behavior in their own medical encoun-

ters (*13*). The fact that patients are receiving this material is supported by the finding that after only 6 months, 38.6 percent of the patients reported being given material by their provider, and this group increased to 47.8 percent a year later (table 2).

Just as the incorporation of written health education material in the patient visit may change the patient-clinician relationship, there is also a change in the HMO-enrollee relationship. Formerly, the model of contact was that of acute medical care delivery; even for the routine physical the member becomes a patient who is examined by the physician with all the attendant anxiety about possible findings. There is now a new model of interaction which incorporates the classic "educational" one; that is, reading for increased knowledge and further sources of information and attending lectures or seminars to test knowledge and understanding.

In such an atmosphere, the member can now interact differently. Instead of being ill and perhaps fearful and preoccupied, the member who now comes to the seminar at the HMO is well, clothed, and in the company of others. There is none of the intimidation commonly experienced by patients in the acute care encounter. Because discomfort and the barrier between doctor and patient are no longer present, the patient can become a more effective learner and the practitioner a more effective teacher (*14*).

Some authorities in preventive medicine (*13a,15*) have worried that counseling for preventive care can never be incorporated into medical practice in part because it lacks the reinforcement of a cured and grateful patient. Our experience has shown that the seminars are, indeed, rewarding to the staff. The seminars are well-attended, the members are enthusiastic and responsive, and leaders receive positive feedback in evaluations. In addition, it may be that the better informed member can communicate more intelligently, can use resources more appropriately, and can be cared for more effectively—another form of reward for the practitioner. In turn, staff members have been willing to participate in repeated, expanding seminar series (sometimes for several sessions in each series), and clinicians frequently have referred their patients to the programs (as well as to written material) during the medical visit.

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